

Cornell iGEM Batch Metal Sequestration Experiments:

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Purpose: To measure concentrations of metals using ICP-AES with Cornell's nutrient analysis lab.

Day 1:

1. Start 25mL cultures of relevant strains in appropriate media (LB+antibiotics+Arabinose)

Day 2:

1. Measure OD of each culture using a UV spec
2. Combine culture with 25 mL LB+2mM test metal to create a final test concentration of 1mM metal.
3. Immediately take out a sample from each culture for baseline metal concentration. Be quick because these sequestration systems can act fast.

~Day 3:

1. After 8 hours of growth, remove samples from each culture.
2. Centrifuge samples for 5 minutes at 12000xg
3. Pour supernatant into new tubes and discard cells as regulated biological waste.
4. Label and submit baselines and supernatants to Nutrient Analysis Lab for precise metal quantification.